

SUB B1

1. (Amended) An input/output platform (IOP) access module for providing input/output
device access between a host system and another system, via a data network, said IOP access
module comprising:

a Local Transport arranged to provide an interface to an input/output platform (IOP)
supporting an array of input/output devices;

a Remote Transport arranged to provide an interface to said another system, via said data
network; and

a Connection Manager arranged to establish connection services and to create a direct call
path between the Local Transport and the Remote Transport so as to provide access to input/output
devices.

3. (Amended) The input/output platform (IOP) access module of claim 1, wherein said host
system corresponds to a host server, said another system corresponds to any one of remote servers,
via said data network.

SUB B2

7. (Amended) A host system, comprising:

a processor;

an array of storage devices;

a driver module for exporting local storage device access onto a computer network, said
driver module comprising:

6 a device driver module arranged to provide an interface to said array of local storage
7 devices;

8 a host driver module arranged to provide an interface to an operating system, said
9 host driver module comprising a Local Transport which communicates with the device
10 driver module, a Remote Transport which provides an interface to said computer network,
11 and a Connection Manager which establishes connection services with remote systems on
12 said computer network and coordinates functions responsible for creating a direct call path
13 between the Local Transport and the Remote Transport to provide access to said storage
14 devices; and

15 a communication layer which supports communications between the host driver
16 module and the device driver module.

23. (Amended) A process of establishing a service connection to a local input/output
platform (IOP) connected to a local bus using a system driver module in response to a request from
a remote server on a system area network, comprising the steps of:

beginning initialization of said driver module which provides access to a local storage system
while bypassing protocol stacks of a host operating system, said system driver module comprising
a Local Transport which provides direct access to the local storage device system, a Remote
Transport which interfaces to other nodes of said system area network, and a Connection Manager
which provides connection services and coordinates functions responsible for creating a direct call
path between the Local Transport and the Remote Transport;

10 scanning, at said Local Transport, the local bus to locate and initialize all local input/output
11 platforms (IOPs), and building an IOP context structure for each input/output platform (IOP) found;
12 preparing, at said Remote Transport, to accept a request for a service connection from said
13 remote server on said system area network;

14 asking, at said Connection Manager, whether said Local Transport determines the number
15 of input/output platforms (IOPs), and building a descriptor structure for each input/output platform
16 (IOP) which includes an exported table of function call pointers and the context required by the
17 Local Transport to communicate with the input/output platform (IOP); and

18 establishing a system area network management communication channel through the Remote
19 Transport, which waits for an external connection from said remote server on said system area
20 network for exporting local device access onto said system area network using said direct call path
21 between the Local Transport and the Remote Transport.
